



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 8**

1595 Wynkoop Street
DENVER, CO 80202-1129
Phone 800-227-8917
<http://www.epa.gov/region08>

MAY 24 2010

Ref: 8EPR-N

Robert J. Thompson, District Ranger
Mystic Ranger District
Black Hills National Forest
8221 South Highway 16
Rapid City, SD 57702

RE: EPA Comments on Draft Environmental
Impact Statement, Mystic Range Project,
CEQ #20100114

Dear Mr. Thompson:

In accordance with our responsibilities under the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4321, *et seq.*, and Section 309 of the Clean Air Act, 42 U.S.C. Section 7609, the U.S. Environmental Protection Agency Region 8 (EPA) has reviewed the April 2010 Draft Environmental Impact Statement (DEIS) for the Mystic Range Project. This DEIS was prepared by the Mystic Ranger District of the U.S. Department of Agriculture Forest Service (USFS) Black Hills National Forest to analyze potential environmental impacts associated with the reauthorization of domestic livestock grazing permits on eight allotments in the Mystic Ranger District. The project area is just west of Rapid City, South Dakota.

The USFS administers the 85,055 acres of the project area. The Mystic Range Project's main focus is to assess whether livestock grazing should continue on the proposed eight allotments, and if so, to determine any necessary revisions to current rangeland management practices. Specifically, the Mystic Ranger District analyzes current practices to determine potential improvements to livestock management, species composition of upland vegetation, streambank stability, and riparian vegetation diversity and abundance, and potential reductions in livestock-vehicle collisions.

A brief overview of the eight allotments under review indicates that all but one (Bald Horse) contain upland vegetation that is currently considered below desired conditions. In addition, there are concerns with the condition and/or trends in all but one allotment (Porcupine) regarding riparian vegetation and streambanks. Current authorized livestock use is as follows:

- The Bald Horse Allotment (27,828 acres) - The USFS currently allows 1,921 Animal Unit Months (AUMs), or 299 cow/calf pairs, under one permit. A nine pasture deferred rotation grazing system is employed during the June 1 - October 26 season of use.

- The Deerfield Allotment (7,824 acres) - The USFS currently allows 631 AUMs, or 102 cow/calf pairs, under one permit. A six pasture deferred rotation grazing system is employed during the June 6 – October 25 established season of use.
- The Palmer Gulch Allotment (14,190 acres and includes a portion of the Norbeck Wildlife Preserve) - The USFS currently allows a total of 869 AUMs, or 144 cow/calf pairs. These numbers are distributed among three separate rotations (North Rotation, South Rotation, and Winter Use) of a twelve pasture grazing system with deferred rotations under two permits. The established season of use for the North Rotation is June 1 – October 31, for the South Rotation is June 1 – October 21, and for Winter Use is October 22 – May 31.
- The Porcupine Allotment (9,858 acres) - The USFS currently allows 1,653 AUMs, or an average use equivalent to 334 cow/calf pairs, under one permit. A twelve pasture Holistic Resource Management grazing system is employed to use a mix of rest and deferred rotation for the established season of use (June 9 – October 30).
- The Redfern Allotment (11,573 acres) - The USFS currently allows 1,159 AUMs, or 195 cow/calf pairs, under one permit. A five pasture deferred rotation grazing system is employed during the June 11 – October 25 established season of use.
- The Rimmer Allotment (2,011 acres) - The USFS currently allows 175 AUMs, or 33 cow/calf pairs, under one permit. A two pasture deferred rotation grazing system is employed during the June 11 - October 10 established season of use.
- The Slate Prairie Allotment (5,896 acres) - The USFS currently allows 1,233 AUMs, or 200 cow/calf pairs, under one permit. A five pasture deferred rotation grazing system is employed during the June 1 – October 20 established season of use.
- The Tigerville Allotment (5,825 acres) - The USFS currently allows 715 AUMs, or 112 cow/calf pairs, under one permit. A six pasture deferred rotation grazing system is employed during the June 1 – October 25 established season of use.

The three alternatives analyzed in the DEIS are Alternative A (No Action), Alternative B, and Alternative C (Proposed Action). Alternative A would eliminate grazing from all eight allotments two years after the decision is made. Existing structural improvements, including fencing, water developments, and water pipelines, would be abandoned. Alternative B would reauthorize grazing on all eight allotments with no new construction of range structures. Existing improvements would be maintained or reconstructed, as needed. Alternative C would reauthorize grazing on all eight allotments and includes prescribed burning and construction of new range structures, including fences, cattle guards, and water developments. The new structures are intended to provide better resource protection, better livestock distribution, and reduce livestock-vehicle collision potential. Existing improvements would be maintained or reconstructed, as needed. Both Alternatives B and C include adaptive management options, which incorporate design criteria and best management practices (BMPs). The adaptive management options may be employed if long-term effectiveness monitoring indicates the need. The USFS has not identified a preferred alternative.

In a July 9, 2009 letter, EPA provided input during the scoping process for this project, and we appreciate that the USFS addressed many of our comments in the DEIS. As a result, our

concerns with the April 2010 DEIS have been narrowed to these remaining issues: (1) water resources; (2) adaptive management and monitoring; and (3) air quality. These concerns are the basis for the EPA rating discussed at the conclusion of this letter.

Water Resources

Wetlands: In your April 9, 2010 response letter to our scoping comments for the project, you note that “[o]verall, no effects to wetlands areas are anticipated due to Design Criteria and BMPs.” To clarify this point, we recommend that additional information be provided in the DEIS regarding the acreage of wetlands impacts for each alternative by allotment. The currently degraded condition should not be used as the baseline for assessing continued degradation that may result from future grazing. In addition, close coordination with the U.S. Army Corps of Engineers (USACE) is necessary to determine applicability of any Clean Water Act Section 404 regulatory requirements or oversight. The results of this coordination should be discussed in the Final EIS.

EPA notes Executive Order (EO) 11990 - Protection of Wetlands (May 24, 1977) states in pertinent part: "Section 1. (a) Each agency shall provide leadership and shall take action to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities for (1) acquiring, managing, and disposing of Federal lands and facilities; and (2) providing Federally undertaken, financed, or assisted construction and improvements; and (3) conducting Federal activities and programs affecting land use, including but not limited to water and related land resources planning, regulating, and licensing activities. (b) This Order does not apply to the issuance by Federal agencies of permits, licenses or allocations to private parties for activities involving wetlands on non-Federal property." USFS should consider and document how EO 11990 will be carried out with regard to this project.

Surface Water: The project area includes three streams- Rapid Creek, Spring Creek, and Victoria Creek -that are considered impaired. All three streams have impaired reaches that are not meeting their beneficial use of coldwater permanent fish life propagation due to high temperatures from natural sources (although grazing or other USFS activities may be playing a role). One of these streams, Spring Creek, has impaired water quality due to fecal coliform bacteria as identified in the Total Maximum Daily Load (TMDL). The Spring Creek TMDL for Fecal Coliform recommends that “livestock access to streams should be reduced, and livestock should be provided sources of water away from streams.” Alternative B does not meet the intent of this TMDL.

We recommend that a table be provided to clearly identify the streams of the project area that are classified as “coldwater streams.” Appendix B, Design Criteria, Mitigation Measures, and Monitoring, includes a requirement applicable to all South Dakota coldwater streams. Specifically, when water flow is present, the discharge of dredged or fill material shall not take place between October 15 and April 1. This requirement is intended to meet the USACE, South Dakota Regional Condition, for any adaptive management actions that would need to be

authorized under a Clean Water Act Section 404 Nationwide Permit (NWP). The regional condition is intended to meet NWP #3 to protect spawning areas and specifically to protect fall spawning brook or brown trout. Again, close coordination with the USACE is necessary to determine applicability of any Clean Water Act Section 404 regulatory requirements.

In addition, EPA is concerned with the limited water quality data presented in the DEIS. As you know, grazing has the potential to degrade water quality through increased sedimentation and loading of nutrients and pathogens. We recommend that you include requirements for monitoring the following water quality parameters: fecal coliform and total bacteria counts, nutrient concentrations, and temperature.

Adaptive Management and Monitoring

We are pleased with the wide range of adaptive management options that may be exercised under Alternatives B and C, as warranted by monitoring results. In general, we support broad consideration of adaptive management options, such as exclusions and upland water developments, whenever feasible to protect streams, wetlands, and riparian corridors. We also recommend protection of stream corridors through use of a minimum 100 foot buffer, particularly where grazing may be contributing to pathogen and temperature concerns. We recommend that the Final EIS specify both positive and negative potential impacts of each adaptive management option.

In addition, an explanation should be provided regarding the general timing of adaptive management implementation given that effectiveness monitoring would only occur every 5-10 years. We recommend that shorter timeframes be considered if undesirable results are encountered sooner than 5-10 years. Also, long-term goals should be established for achieving positive trends and desired conditions for currently degraded streams and riparian areas.

A firm commitment to effectiveness monitoring should be included in the Final EIS. Adaptive management cannot be employed without the full implementation of its associated monitoring schedule. Consequently, an environmentally conservative default management plan should be defined in case adequate resources for monitoring are not secured.

The DEIS indicates that short-term implementation monitoring is largely the responsibility of the permittee. The Final EIS should include a discussion of how the Annual Operating Instructions will ensure compliance with these monitoring requirements. Also, as noted above, EPA recommends requirements for annual monitoring of water quality, especially given the impaired water quality listing of Spring Creek, in part due to fecal coliform from livestock. Such data may also be a valuable aid in assessing potential relationships between pathogen contamination and temperature issues.

Air Quality

The project area is near the populations of Rapid City, Hill City, and Custer, as well as a

mandatory Class I federal area (Wind Cave National Park) and a Sensitive Class II area (Black Elk Wilderness). In addition to health-based standards to protect ambient air quality, the Clean Air Act requires special protection of visibility in the nation's large National Parks and Wilderness Areas (identified as mandatory Class I federal areas) and establishes a national goal for "the prevention of any future, and the remedying of any existing, impairment of visibility in mandatory Class I federal areas which impairment results from man-made air pollution." EPA's implementing regulations require states to submit implementation plans that contain such measures as are necessary to make reasonable progress toward the national goal, including improvement in visibility on the worst days and prevention of visibility degradation on the best days. See 40 CFR 51.300-309. Actions by Federal Land Managers (FLMs) that lack adequate mitigation of potential visibility impacts could interfere with a state's reasonable progress goals and impede ability to meet Clean Air Act requirements.

Table 3-9 of the DEIS indicates that 23,608 acres of prescribed fires have been recently approved for projects in the same area. These prescribed fires are occurring presently on most allotments (or have been completed). It is unclear whether this large amount of acreage is being (or was) burned simultaneously or in smaller treatment blocks; however, at any given time, we recommend the use of small, scattered treatment blocks to minimize adverse impacts to air quality. Appendix C- Past, Present, and Foreseeable Activities in the Mystic Range Project- does not include quantification of present and foreseeable prescribed burn activities.

Under Alternative C, a 5,300 acre prescribed burn is proposed for the Porcupine Allotment. This significant prescribed fire activity may cause degradation of air quality and visibility in the region. While we note that the proposed prescribed burn is dependent on securing funding, EPA is concerned that the DEIS does not contain any analysis related to direct, indirect, or cumulative air quality impacts that would be associated with such a large burn. A thorough discussion of the project's smoke impacts on nearby population centers and Class I and Sensitive Class II areas should be included in the Final EIS. We recommend that the Final EIS include: (1) appropriate smoke mitigation (including meteorological conditions favorable for mitigated prescribed fire smoke and alternatives to prescribed fire such as mechanical fuel reduction methods), modeling, and monitoring techniques; (2) the incorporation of the Interagency Prescribed Fire Planning and Implementation Procedures Guide into the Burn Plan designed specifically for this project; (3) coordination with the South Dakota Department of Environment and Natural Resources; (4) adherence to the USFS internal process for managing prescribed fire; and (5) public notification of pending burns.

Although not an air quality related concern, we also note that the proposed prescribed burn has not received concurrence from the South Dakota State Historic Preservation Office. We would expect to see a discussion of any such consultation in the Final EIS.

EPA's Rating and Recommendation

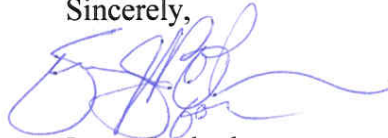
Consistent with Section 309 of the Clean Air Act, it is EPA's responsibility to provide an independent review and evaluation of the potential environmental impacts of this project. Based

on the procedures EPA uses to evaluate the adequacy of the information and the potential environmental impacts of the proposed action, EPA is rating this DEIS as Environmental Concerns – Insufficient Information (EC-2). Because a preferred alternative was not identified in the DEIS, we are rating the DEIS based on Alternatives B and C (we do not rate the no action alternative). The “EC” rating indicates that EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. The “2” rating indicates that EPA has identified additional information, data, analyses, or discussion that should be included in the Final Environmental Impact Statement. A full description of EPA’s rating system is enclosed.

Although Alternatives B and C received an EC-2 rating in this review, we do not view them as equivalent. EPA recommends Alternative C as the environmentally-preferable action alternative to mitigate water resource impacts. The construction of new range structures would provide better resource protection and better livestock distribution, allowing a move toward ultimate recovery of currently degraded streams and riparian areas. Alternative C meets the intent of the Spring Creek TMDL for Fecal Coliform bacteria, which recommends that “livestock access to streams should be reduced, and livestock should be provided sources of water away from streams.” We hope that our comments regarding water resources and air quality will assist you in further reducing the environmental impacts of this project. Additionally, we look forward to seeing further detail regarding the adaptive management and monitoring plans in your Final EIS.

We appreciate the opportunity to review and comment on this Draft EIS. If we may provide further explanation of our comments, please contact me at 303-312-6004, or your staff may contact Amy Platt at 303-312-6449.

Sincerely,



Larry Svoboda

Director, NEPA Compliance and Review Program
Ecosystems Protection and Remediation

Enclosure

U.S. Environmental Protection Agency Rating System for Draft Environmental Impact Statements

Definitions and Follow-Up Action*

Environmental Impact of the Action

LO - - Lack of Objections: The Environmental Protection Agency (EPA) review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC - - Environmental Concerns: The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce these impacts.

EO - - Environmental Objections: The EPA review has identified significant environmental impacts that should be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no-action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU - - Environmentally Unsatisfactory: The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the Council on Environmental Quality (CEQ).

Adequacy of the Impact Statement

Category 1 - - Adequate: EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis of data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2 - - Insufficient Information: The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses or discussion should be included in the final EIS.

Category 3 - - Inadequate: EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the National Environmental Policy Act and or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

* From EPA Manual 1640 Policy and Procedures for the Review of Federal Actions Impacting the Environment. February, 1987.